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| 10/584,203 | 06/23/2006 | Kazumari Kobayashi | 292946US0PCT | 9134 |
| 22850 7590 01/04/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | | |
| EXAMINER ALEJANDRO, RAYMOND | | | | |
| ART UNIT 1795 | | PAPER NUMBER | | |
| NOTIFICATION DATE 01/04/2010 | | DELIVERY MODE ELECTRONIC | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/584,203

Applicant(s)

KOBAYASHI ET AL.

Examiner

Raymond Alejandro

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 4-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :06/23/06, 08/18/06, 01/08/07, 07/18/07, 02/08/08.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 1-3) in the reply filed on 10/16/09 is acknowledged.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The following information disclosure statements (IDS) submitted on 06/23/06, 08/18/06, 01/08/07, 07/18/07, 02/08/08 were considered by the examiner.
4. The information disclosure statements filed 08/21/07, 12/11/07, 02/25/08, 04/14/08, 09/08/08, 10/27/08, 05/05/09, 09/10/09 fail to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Drawings

5. The drawings were received on 06/23/06. These drawings are acceptable.

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

8. Claim 3 is objected to because of the following informalities: all parenthesis must be removed so as to have a clear understanding of the present claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 3 recites the limitation "*material structure*" in line 2. There is insufficient antecedent basis for this limitation in the claim. Since claim 1 recites "*material metal structure*", it is immediately unclear to the examiner whether the limitation of claim 3 refers to the same material of claim 1.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese publication JP 07-94193 (herein called JP'193).

As to claims 1 and 3:

JP'193 discloses an electrode can for a manganese dry battery wherein the can feature contains zinc composition having a purity of 99.99 wt % or more, and having added thereon 30-8000 ppm of bismuth (i.e. 0.003-.8 wt %) and 10-10000 ppm (.001-0.1 wt %) of magnesium (ABSTRACT/0010). The composition is subject to a hot pressing and piercing to obtain a zinc alloy plate which is formed into a negative electrode can element having a cylindrical shaped bottom. It can be seen that the electrode can may contain 99.8 wt % of zinc (ABSTRACT/0010). *Note that in claim 1 the amount of the remaining elements (i.e. antimony, lead, cadmium) can be 0 wt % or 0 ppm.*

With respect to the claimed grain size and the O/I ratio, it is noted that the negative electrode can of JP'193 has the substantially the same structure and composition as that of the present claim, thus, in view of such sameness, it is contended that the grain size of the crystal metal material as well as the O/I ratio directly related to the disclosed material in JP '045 are also substantially identical to that of the present claims, and thus, it is inherently disclosed therein. Accordingly, products of identical chemical composition can not have mutually exclusive properties, and thus, the claimed property (i.e. the grain size of the crystalline metal material), is necessarily present in the prior art material. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01 [R-3] Composition, Product, and Apparatus Claims).

As to claim 2:

JP'193 discloses 10-10000 ppm (.001-0.1 wt %) of magnesium (ABSTRACT/0010).

Consequently, as to the limitation concerning the claimed grain size and the O/I ratio it is asserted that the structure or composition recited in the prior art reference is substantially identical to that of the claims, and therefore, claimed properties, characteristics or functions are presumed to be inherent (MPEP 2112. Requirements of Rejection Based on Inherency). Thus, the prior art material embodiment seems to be identical except that the prior art is silent about an inherent function, property and/or characteristic. In that, it is noted that the extrinsic evidence makes clear that the missing descriptive matter is necessarily present in disclosed

material of the negative electrode can described in the reference, and that it would be so recognized by persons of ordinary skill.

Therefore, the claims are anticipated by JP'193. However, if the claims are not anticipated the claims are obvious as it has been held similar products claimed in terms of its function, property and/or characteristic are obvious. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977) and *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980). *See rationale and/or technical reason above to reasonably support the determination that the inherent function and/or characteristic necessarily flows from the teaching of the applied prior art.*

17. (at least) Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese publication JP 2000-58045 (herein called JP'045).

As to claims 1 and 3:

JP'045 discloses an anode active material, battery anode can or manganese battery using zinc anode plate wherein the active material contains zinc composition having a purity of 99.99 wt % or more, and having added thereon 30-8000 ppm of bismuth (i.e. 0.003-.8 wt %) and 10-10000 ppm (.001-0.1 wt %) of magnesium (ABSTRACT/0011, 0008/Table 2). The composition is subject to a hot pressing and piercing to obtain a zinc alloy plate which is formed into a negative electrode can element having a cylindrical shaped bottom. It can be seen that the electrode can may contain 99.8 wt % of zinc (ABSTRACT/0011, 0008/Table 2). *Note that in*

claim 1 the amount of the remaining elements (i.e. antimony, lead, cadmium) can be 0 wt % or 0 ppm.

With respect to the claimed grain size and the O/I ratio, it is noted that the negative electrode can of JP'045 has the substantially the same structure and composition as that of the present claim, thus, in view of such sameness, it is contended that the grain size of the crystal metal material as well as the O/I ratio directly related to the disclosed material in JP'045 are also substantially identical to that of the present claims, and thus, it is inherently disclosed therein. Accordingly, products of identical chemical composition can not have mutually exclusive properties, and thus, the claimed property (i.e. the grain size of the crystalline metal material), is necessarily present in the prior art material. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01 [R-3] Composition, Product, and Apparatus Claims).

Consequently, as to the limitation concerning the claimed grain size and the O/I ratio it is asserted that the structure or composition recited in the prior art reference is substantially identical to that of the claims, and therefore, claimed properties, characteristics or functions are presumed to be inherent (MPEP 2112. Requirements of Rejection Based on Inherency). Thus, the prior art material embodiment seems to be identical except that the prior art is silent about an inherent function, property and/or characteristic. In that, it is noted that the extrinsic evidence makes clear that the missing descriptive matter is necessarily present in disclosed

material of the negative electrode can described in the reference, and that it would be so recognized by persons of ordinary skill.

Therefore, the claims are anticipated by JP'045. However, if the claims are not anticipated the claims are obvious as it has been held similar products claimed in terms of its function, property and/or characteristic are obvious. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977) and *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980). *See rationale and/or technical reason above to reasonably support the determination that the inherent function and/or characteristic necessarily flows from the teaching of the applied prior art.*

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (571) 272-1282. The examiner can normally be reached on Monday-Thursday (8:00 am - 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-wei Yuan can be reached on (571) 272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raymond Alejandro/
Primary Examiner, Art Unit 1795